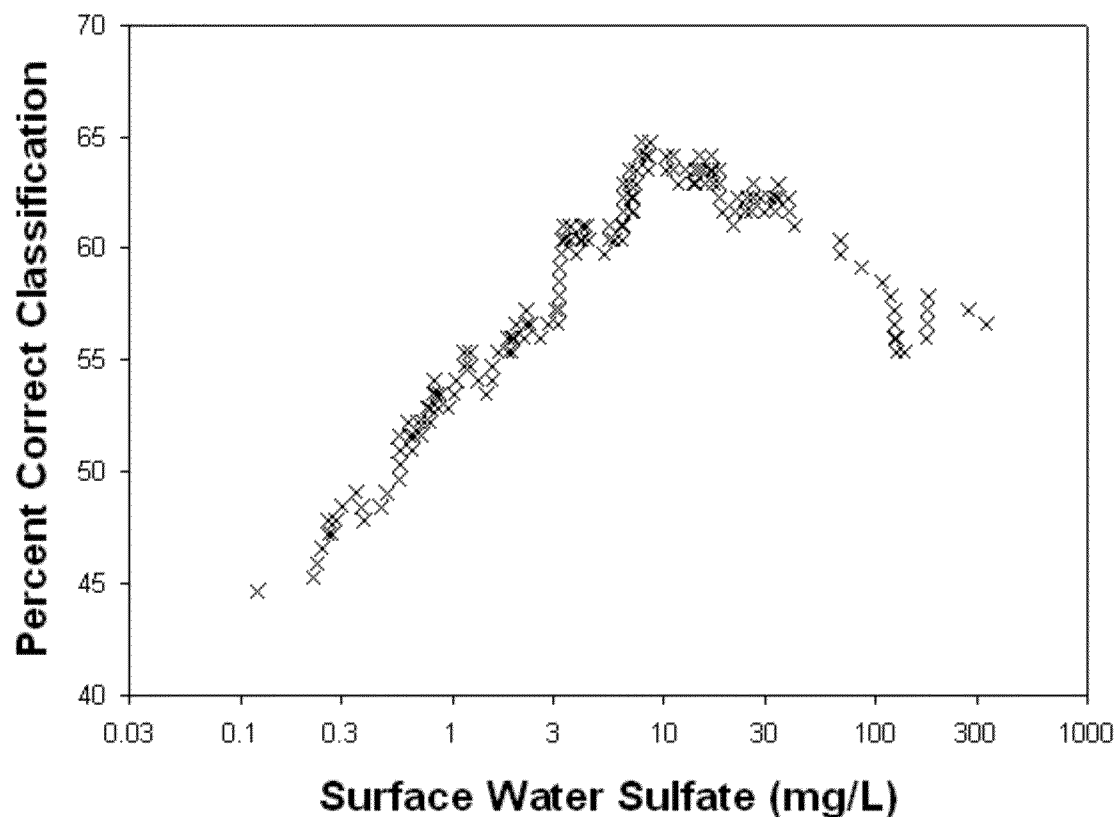


To: Swain, Ed (MPCA)[edward.swain@state.mn.us]; Erickson, Russell[Erickson.Russell@epa.gov]
Cc: Monson, Phil (MPCA)[phil.monson@state.mn.us]
From: Mount, Dave
Sent: Thur 2/6/2014 10:22:23 PM
Subject: RE: Thanks, and updated wild rice data

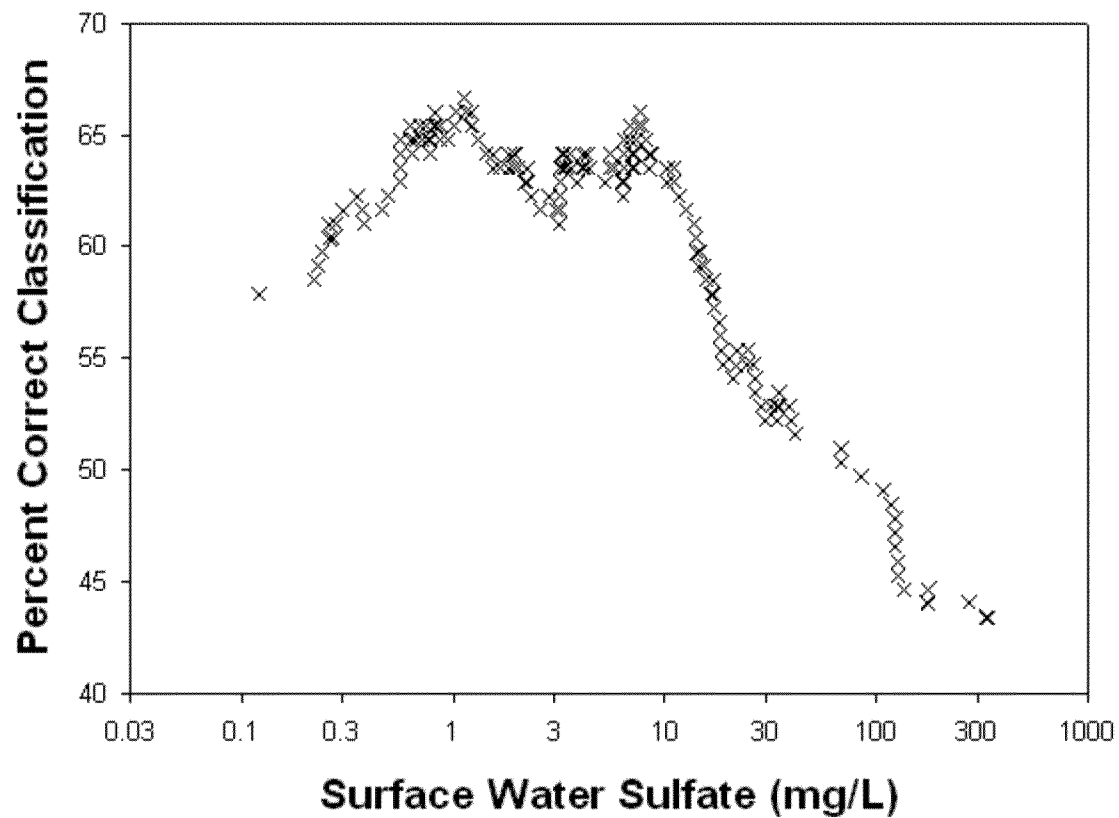
More ideas:

Here are a couple plots that look at the ability of different decision criteria to “correctly classify” lakes – correct classification means that a lake below that cutpoint does have rice and above the cutpoint there is no rice (or rice <5% depending on what “rice presence” criterion you use). Interestingly, you’ll not that the quality of classification declines when you raise the classification criterion above about 10 mg/L. I tried sulfate > 10 mg/L *or* sulfide > 0.3 mg/L and it bumped the maximum correct classification up another percent or two, but not that much.

Based on Rice Coverage >0%

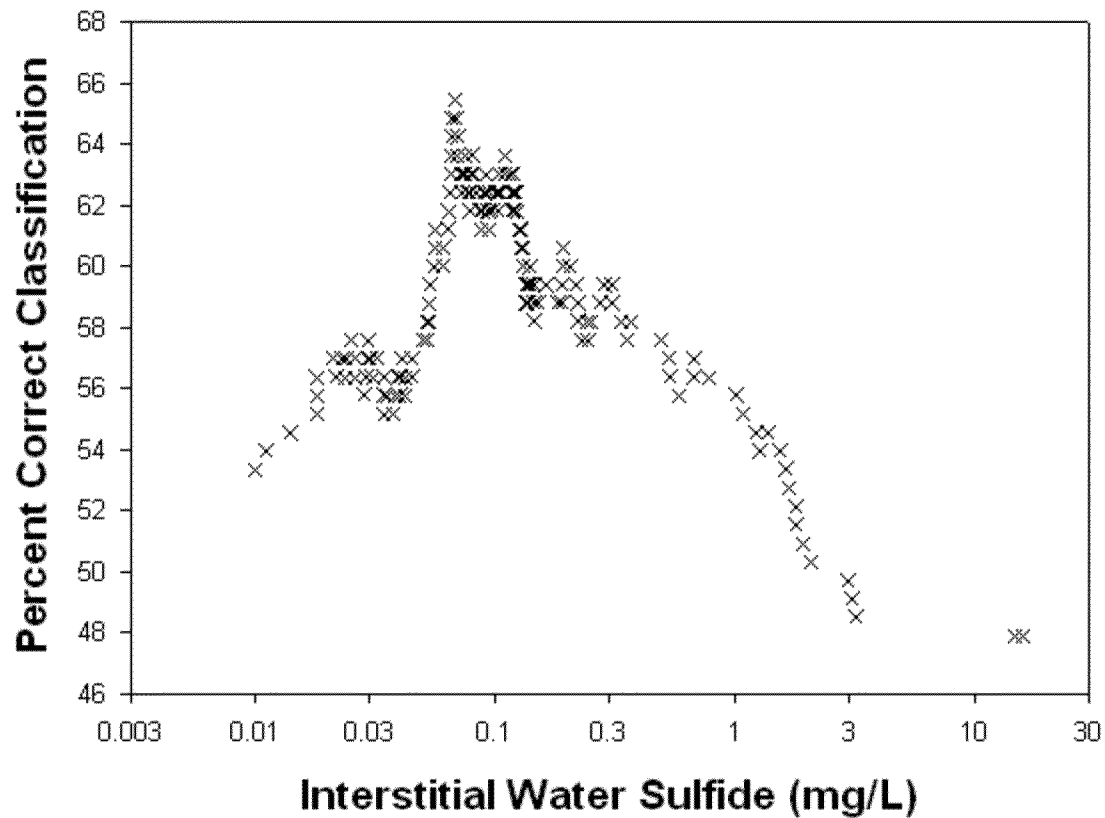


Based on Rice Coverage >5%



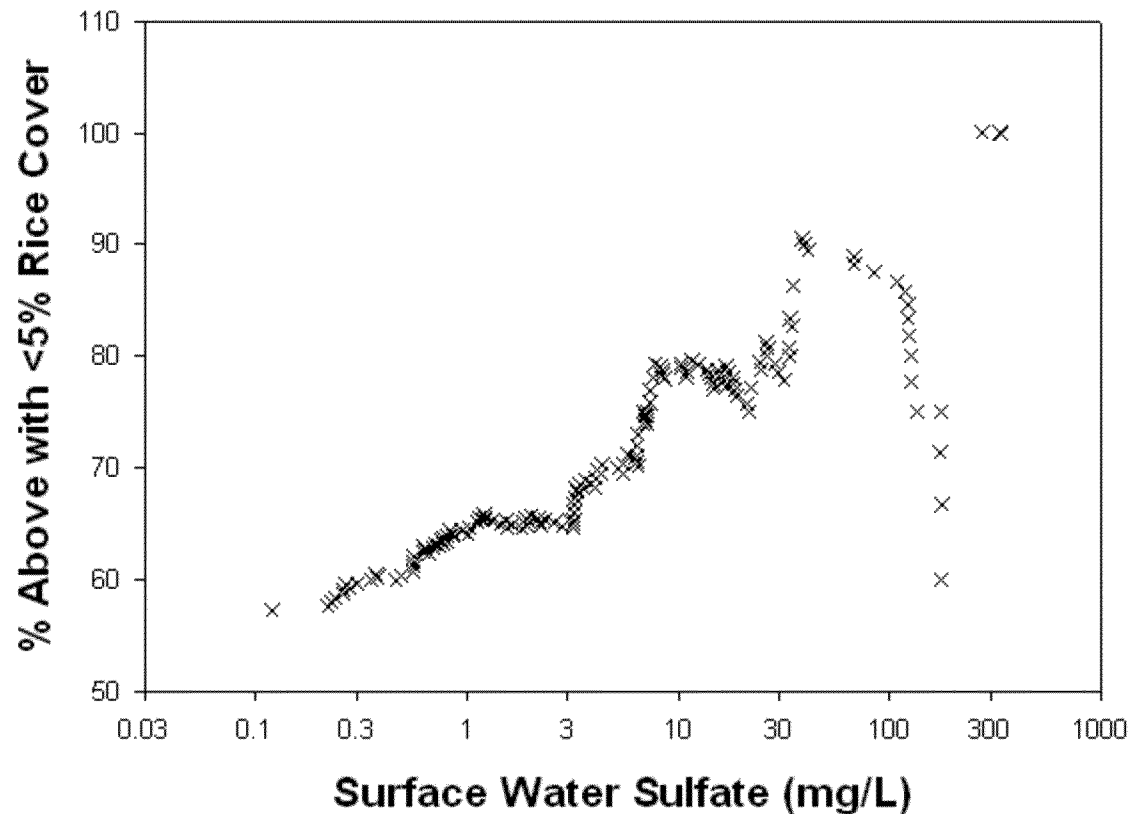
I also tried the same thing with just IW sulfide – pattern is a little harder to interpret, but suggests that maybe something lower than 0.3 mg/L.

Based on Rice Coverage >5%



Finally, I changed the metric to being the percent of lakes above a given sulfate that have rice coverage of less than 5%. This plot might argue for something a little lower than 10 mg/L, but it's hard to say.

Based on Rice Coverage >5%



Dave

From: Swain, Ed (MPCA) [mailto:edward.swain@state.mn.us]

Sent: Wednesday, February 05, 2014 6:00 PM

To: Erickson, Russell; Mount, Dave

Subject: Thanks, and updated wild rice data

Dave and Russ,

We got a lot out of our discussion yesterday—thank you very much. Phil and I are going to rapidly push ahead with a lot of analysis, thought, and writing.

Attached is the updated file that was distributed to our advisory group last week. We caught a lot of errors after we started analyzing it, ranging from missing information to the 2x error in the sulfide. I think it is in pretty good shape now.

Please be tempted to do some more fiddling with the data!

Ed

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Edward Swain, Ph.D.

Research Scientist

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St. Paul, Minnesota

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